

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PHNL031355WO	FOR FURTHER ACTION	See item 4 below
International application No. PCT/IB2004/052394	International filing date (<i>day/month/year</i>) 11 November 2004 (11.11.2004)	Priority date (<i>day/month/year</i>) 18 November 2003 (18.11.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant KONINKLIJKE PHILIPS ELECTRONICS N.V.		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	This REPORT consists of a total of 7 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
<input checked="" type="checkbox"/>	Box No. I	Basis of the report																							
<input type="checkbox"/>	Box No. II	Priority																							
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																							
<input type="checkbox"/>	Box No. IV	Lack of unity of invention																							
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																							
<input type="checkbox"/>	Box No. VI	Certain documents cited																							
<input type="checkbox"/>	Box No. VII	Certain defects in the international application																							
<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application																							
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Date of issuance of this report 22 May 2006 (22.05.2006)</td> </tr> <tr> <td style="padding: 2px;">Authorized officer <div style="text-align: center; font-weight: bold;">Cecile Chatel</div></td> </tr> <tr> <td style="padding: 2px;">Telephone No. +41 22 338 70 60</td> </tr> </table>	Date of issuance of this report 22 May 2006 (22.05.2006)	Authorized officer <div style="text-align: center; font-weight: bold;">Cecile Chatel</div>	Telephone No. +41 22 338 70 60
Date of issuance of this report 22 May 2006 (22.05.2006)				
Authorized officer <div style="text-align: center; font-weight: bold;">Cecile Chatel</div>				
Telephone No. +41 22 338 70 60				
Facsimile No. +41 22 740 14 35				

Form PCT/IB/373 (January 2004)

BEST AVAILABLE COPY

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 15 FEB 2005

PCT PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IB2004/052394

International filing date (day/month/year)
11.11.2004

Priority date (day/month/year)
18.11.2003

International Patent Classification (IPC) or both national classification and IPC
G11B20/00, G11B19/12

Applicant
KONINKLIJKE PHILIPS ELECTRONICS N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Authorized Officer

Ogor, M

Telephone No. +31 70 340-4458



BEST AVAILABLE COPY

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/052394

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

BEST AVAILABLE COPY

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/052394

**Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, inventive step or
Industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	2-5 8-14
	No: Claims	1 6 7
Inventive step (IS)	Yes: Claims	
	No: Claims	8 13 14
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

BEST AVAILABLE COPY

Item V

Reference is made to the following documents:

D1: US 2002 0087814

D2: US 5 841 861

D3: EP 1 065 664

1) The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1 and 6 is not new in the sense of Article 33(2) PCT.

1.a) D1 discloses (fig.1,4; par.40-42) a method of reading from a record medium (DVD) with the steps of

- reading a first set of cryptographic data from a first predetermined location of the medium (fig.4: read encrypted validation data)
- reading a second set of cryptographic data from a second predetermined location of the medium (fig.4: read copy of encrypted validation data)
- detecting a predefined correspondence between the two sets (fig.4: comparison)
- outputting data only if said predefined correspondence is satisfied, otherwise inhibiting data output (fig.4: deny authorization if no match). Therefore claim 1 is not new.

1.b) D2 discloses (fig.5; c.5, l.34-54) a record medium (optical disc with two layers) comprising a storage space with at least two sets of predetermined cryptographic protect data stored in predetermined locations (fig.5: key A2 in one layer, B2 in the other layer). Therefore claim 6 is not new.

2) The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 8 does not involve an inventive step in the sense of Article 33(3) PCT.

D3 discloses a disc drive apparatus with two separate pickup units working simultaneously (fig.1; abstract) and a data flow controller having first and second inputs coupled to the outputs of said pickup units respectively (fig.2; par.39-40,46). In dependence on the contents received at its two inputs, the data flow controller selects one head for Read/Write and halts the other head (par.40).

The subject-matter of claim 8 therefore differs from this known apparatus in that the data flow controller controls two switches respectively located behind the output of the first (resp.

second) pickup.

The problem to be solved by the present invention may therefore be regarded as inhibiting the data to be output from the pickup in dependence on the contents received at the input of the data flow controller.

D1 solves the same problem (see above: in dependence on the contents received at its two inputs, the data flow controller selects one head for Read/Write and halts the other head) with an alternative feature (halting). It is however generally known to the person skilled in the art that halting a head is an equivalent solution to the switches of the invention and can be interchanged with that feature where circumstances make it desirable. Therefore claim 8 is not inventive.

3) Dependent claims 7 13 14 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, see the documents and the corresponding passages cited in the search report.

Item VIII

The combination of the features of dependent claims 2-5 9-12 is neither known from, nor rendered obvious by, the available prior art. However, attention is drawn to the following.

It is not understood how the two sets of cryptographic data are always simultaneously read in the case of an original disc. According to the description p.5, I.1-4,

- the first OPU is moved to the track containing supposedly the first set S1,
- the second OPU is moved to the track containing supposedly the second set S2,
- once both OPUs are in position over the predefined tracks, the data is read from these tracks.

Case 1: Supposing that, by design, the two sets S1 and S2 are both located at the same angle $2\pi/a$ of the OPUs when the OPUs are ready to start reading (see fig.a of annexed sheet A), then the two sets will indeed be read simultaneously.

Case 2: Supposing that, by design, the two sets S1 and S2 are located at two different angles $2\pi/a$ and $2\pi/b$ of the OPUs when the OPUs are ready to start reading (see fig.b of annexed sheet A), **then the two sets cannot be read simultaneously because of the delay (proportional to $2\pi/a - 2\pi/b$) between the heads passing over their respective set.**

Therefore the original disc of case 2 will always be judged as a forged copy!

Furthermore, the description states that, if not simultaneous, then the maximum mutual delay between the two readings should be less than half the revolution period of the disc (p.5, l.9-12) to judge the disc as being an original (p.5, l.12-14). Fig.c of annexed sheet A gives an example of a forged disc where the delay between the readings is less than half the revolution period of the disc. **According to the description such an illegal disc would be judged as a legal original.** Consequently it appears that the invention as disclosed does not solve the problem of discriminating between original and copies of discs.